

complaining frequently of a "queer and disagreeable sensation about the head."

I was forcibly struck with the similarity of the action of the quinine in this case to that of the protoxide of nitrogen.

My friend Dr. Vickers, of this place, whom I once saw under the operation of moderately large doses of quinine in an attack of remittent fever, was somewhat similarly affected by it. He tells me it generally has an exhilarating effect upon him.

January 23, 1847.

ART. III.—*Removal of the Superior Maxilla for a tumour of the antrum; Apparent cure. Return of the disease. Second operation. Sequel.*
By J. MARION SIMS, M. D., of Montgomery, Ala., [With a wood-cut.]

THE subject of this operation was a negro boy, George, aged 18, the property of Dr. Thomason, of Loundesboro, Ala. The disease first manifested itself some time in the spring of '44, and was supposed to be merely an excrescence from the gum, which was several times removed and cauterized; being always reproduced very soon afterwards. In the course of five or six months his master discovered that the cheek began to bulge out, and, in fact, that he had some serious affection of the bone.

I saw the case early in January, 1845. The tumour appeared to be as large as a good sized orange, occupying the entire extent of the left upper jaw, and involving to some degree the malar bone. The mouth was in a bad condition; the gums purple, tumid and bleeding on the slightest touch; the teeth decayed, with the fangs here and there exposed, while at other points they were firmly ankylosed with their alveoli. The free scarification of the gums, the extraction of the decayed molars, and attention to his general health, soon had him in a proper condition for an operation, which was performed on the 22d of January, 1845, with the assistance of Drs. Ames, Boling, and Baldwin, and in the presence of a large number of medical friends.

The cheek was opened by the curvilinear incision, according to the process of Warren and Velpeau, taking particular pains to avoid the parotid duct. The facial artery being secured, the anterior flap was dissected up to the edge of the orbit. The ala nasi and frenum of the lip were cut up to permit the more easy elevation of the flap. The origin of the inferior oblique was divided, and the contents of the socket separated from the orbital plates of the maxillary and molar bones. The zygomatic face of the maxilla was freed by a downward dissection of the lower flap.

It now remained to attack the hard parts. The left lateral incisor being extracted, an incision was made through the mucous membrane near to and parallel with the longitudinal palatine suture. Two or three nips of Liston's bone forceps easily divided the alveolar and palatine processes. The eye and its appendages were then supported by the handle of a light silver spoon bent at right angles, while the nasal process was divided obliquely downwards so as to avoid injuring the nasal duct. The broad part of the

malar bone was next divided into the spheno-maxillary fissure, which was more easy than the section of the nasal process, simply because it was more accessible. The separation of the palate plate from the palate process of the maxilla was effected by a thrust with a strong pointed bone knife.

The only remaining bony attachment, being that with the pterygoid process of the sphenoid bone, was separated by another thrust with the knife laterally.

The diseased mass being now movable was started slightly downwards, thus exposing to view the second branch of the fifth pair of nerves, just as it enters the infra-orbital canal, when it was easily divided, producing excessive but momentary pain.

The operation was now quickly completed by clipping the remaining attachments with the scissors.

The bottom of the wound presented a smooth concavity, fitting accurately the ovoid appearance of the tumour, thus showing that not a vestige of the disease was left behind.

It was supposed by the gentlemen present that the hemorrhage did not amount to more than eight or ten ounces. No ligature was applied save to the facial artery, and that was removed before the wound was dressed. The boy bore the operation (which lasted thirty-five minutes), with wonderful fortitude. During its performance, he was allowed brandy and water as occasion seemed to require. At its completion he was permitted to lie down. After waiting half an hour and compressing a single bleeding vessel, the posterior palatine artery, the wound was closed by the interrupted suture and adhesive plaster. There was no stuffing of the cavity and no other dressing. At 2 o'clock, one hour after he was put to bed, his pulse was 84. At 9 P. M. it was 96. He rested well all night.

Jan. 23d. 8 A. M. There is a large quantity of bloody pus secreted this morning. It appears to trickle down the fauces, being easily hawked out in large mouthfuls. Lies on his right side altogether; pulse 104; no pain; disposed to sleep. Ordered cold water dressings to the face.

9 P. M. Purulent secretion moderated; cold water continued; pulse 110.

24th. 8 A. M. Skin cool; no thirst; no pain; rested well all night; pus diminished in quantity; improved in appearance; left off the water dressing. He convalesced very rapidly from this time. On the third day he could eat a little. On the eighth the plasters and sutures were removed and the wound in the cheek found to be healed up entirely. On the ninth day he walked out in the streets, perfectly well.

His rapid recovery from an operation of such magnitude, was a matter of astonishment to all who observed it. In a short time, the cavity was filled up, all to two small openings about the size of a goose quill; the one leading up to the orbit, the other into the nostril. He kept these little passages stuffed with small pledgets of cotton, which for cleanliness were renewed after each meal. He left Montgomery on the first of March in excellent health and fine spirits, *apparently* cured; with no deformity but that from the cicatrix, and a slight twisting of the face to the right side when he laughed. (See fig. on next page.)

The *tumour* is as large as a medium sized orange, having rather a *tense elastic* feel. The only portions of bone visible are, the alveoli of the lateral incisor and cuspidatus, with the tooth attached; a bit of the palatine and nasal processes, and a part of the malar bone. The orbital plates were entirely destroyed by the pressure of the tumour; so were the inferior

spongy bones of the nose. The orbital edge of the maxilla was transformed into a sort of *spiculated* osteo-fibrous structure.



The tumour is almost perfectly round. That segment of it extending from the eye to the alveolar region forming about one-third of its circumference. The next largest part extends from the alveoli along the hard palate, the third projected under and back of the eyeball; while the last and smallest projection was that in the nasal cavity. The surfaces of all these segments are smooth and round, and that portion behind the eye fitted its concavity as accurately as a hard boiled egg does its shell.

The proper substance of the tumour is osseous and scirrrous, and might be termed an *osteo-scirrhoma*. The central portions of it are filled with *stellations* of bony matter sending off spangled radiations towards the circumference of the scirrrous mass.

I sincerely wish that the history of this case could end here, but the *whole* truth must be told.

George had been at home but two months when he began to complain of pain in his cheek. His master immediately discovered that the disease was being reproduced, and sent him back to me early in May. He had so much pain in and about the eye as to require, particularly at night, large doses of morphine for its mitigation. The growth of the tumour was remarkably rapid, so much so as to be perceptible from day to day. From its re-appearance about the first of May, it had in three weeks time got to be a great deal larger than the first tumour. The left eye was bulged out of its socket, deeply injected and lachrymose; vision greatly impaired, with very little power of moving the eye, and none of closing the lids. The skin of the cheek was thinned, reddened, and seemed to be in danger of ulcerating, simply by the mechanical pressure exerted by the rapid development of the morbid mass, which was greatly enlarged not only here, but in every other direction. The cicatrix left by the first operation had become

elevated, broad, hard, and painful, having very much the appearance of the dermoid tumour, termed keloides.

His condition was looked upon now as being perfectly helpless and hopeless, but he begged for a repetition of the operation, which was accordingly performed on the 24th of May (about four months after the first). Several medical friends were present, and I was assisted particularly by Drs. Ames, Baldwin, and Vickers.

The dotted lines (see fig. p. 312) show the direction of the incisions by which the cheek was laid open. It is unnecessary to give the details of the operation, as I simply followed the tumour, separating its attachments on every side, for it was reproduced from every portion of the cavity made by the removal of the first tumour. It was the most tedious and painful operation I have ever witnessed; but the most difficult and perplexing part of it was the dissection of the mass from its attachments at the back of the socket, and as it were, from the very base of the brain. The tumour was pushed downwards by an assistant, while the dissection under the eye was conducted slowly and cautiously, now with the scalpel and again with scissors; all the time cutting deeply in the dark, guided only by the forefinger of the left hand. During the greater part of the operation, he evinced wonderful fortitude, but at the close his strength was almost exhausted, and often he would cry out in the bitterest agony "oh! how long! how long will it last!" and it lasted, I am sorry to say, *one hour and twenty-nine minutes*.

The hemorrhage was much more than at the preceding operation. A small artery at the bottom of the cavity was compressed for several minutes by the finger, and very soon the oozing of blood seemed to cease. I then introduced a piece of fine sponge (wet) just large enough to fill the cavity and adjusted the flaps over it, securing them by the interrupted suture. Its presence was very injurious. It appeared to invite the flow of blood and there was a gradual hemorrhage kept up for some time, till, in the course of two or three hours, his case presented altogether a very alarming aspect.

From the loss of blood during the operation, and from its gradual draining afterwards, as well as from the excessive shock to the nervous system, he passed into a perfect state of collapse. His pulse at one time but 80 in a minute, instantly rising to 140, and even becoming extinguished on the slightest exertion; his respiration 36 in a minute, suddenly mounting to 60; with great restlessness; burning heat of stomach; nausea and vomiting; sinking; excessive prostration; cold extremities, and cold clammy sweat, indicated but too plainly the imminent danger he was in, of dying by the hands of the surgeon. I was exceedingly alarmed about him; cut loose the stitches; laid open the wound; removed the sponge saturated with blood; wiped out a few coagula; saw that there was a gradual oozing from the bottom and sides of the cavity; plugged it up with a bit of charpie wet in creasote water (twelve drops to the ounce of distilled water); watched it for a short time and discovered that it had the happy effect of checking the hemorrhage. The flaps were readjusted and held merely by adhesive plaster. Brandy and carb. ammonia were administered very freely. He had a most uncomfortable night; the cold hands and feet; the nausea and occasional vomiting; the jactitation; internal heat and thirst; the thready frequent pulse, in short all the symptoms of collapse continued unabated for nearly twenty-four hours, at the end of which time, reaction was pretty well re-established, the pulse falling from 160 down to 120 per minute.

As he was now considered safe, the gaping wound was closed by suture. He improved very fast, and his face was well in a week.

The tumour removed was nearly twice as large as the first, presenting the same peculiarities.

It was very soon discovered that the operation was fruitless, for the internal surface of the cavity showed evident symptoms of a reappearance of the disease at every point. As soon as he was sufficiently recovered, he went home, saying, that he intended to return for a third operation if it became necessary. The disease gradually increased, destroying entirely the vision of his left eye, filling up his mouth and throat so as to prevent deglutition, and he died (in four months) comatose, doubtless from the encroachment of the disease on the brain. He was emaciated to a mere skeleton simply from inanition.

Remarks.—There can be but a common feeling of regret at the unfortunate issue of this case.

The first operation was justifiable, and every one was satisfied with it. The propriety of the second might possibly be questioned, but almost any one would have performed it when an apparently healthy young man was begging for it. I committed two errors in the last, which it may be of some practical importance to remember.

The *first* was in attempting to follow the tumour as though it had been perfectly encysted. Instead of separating it from the remaining portion of the malar bone, I ought to have removed the bone with it, by dividing the zygoma and the frontal process, which would have allowed me to get better at the mass. The operation would have been facilitated very materially, and therefore the pain and loss of blood would have been less.

The *next* mistake (and it was a horrid one) was stuffing the cavity with a bit of wet sponge. This substance absorbed the oozing blood, which not coagulating, was conveyed to the most dependent part of the sponge, whence it fell into the throat or ran from the mouth. If the sponge had been permitted to remain for two hours longer, it would certainly have killed him.

I shall always regret that I did not tie the carotid, as was suggested to me by my friend Dr. Ames. It would most assuredly have retarded the reproduction of the disease, and thus have prolonged life.

ART. IV.—*Laceration of the Perineum.* By JOHN P. METTAUER, A. M.,
M. D., LL. D., of Virginia.

THIS accident occasionally complicates delivery, and is generally followed by troublesome consequences when a spontaneous cure does not take place. In cases of slight laceration, such as often occur in first labours, and those of rapid completion, little inconvenience is experienced, as they very soon cure themselves if the parts are kept in contact by a proper position of the body, and by rest in bed. In some extensive lacerations,